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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,437	03/02/2002	Kimmo Laiho	004770.00033	3461

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WASHINGTON, DC 20005-4051

EXAMINER
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NGUYEN, TU X

ART UNIT	PAPER NUMBER
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2618

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/26/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/087,437

Applicant(s)

LAIHO ET AL.

Examiner

Tu X. Nguyen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 February 2007.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17, 19-52 is/are pending in the application.  
4a) Of the above claim(s) 18 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-17 and 19-52 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 02 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

Applicant's arguments with respect to claims 1-17 and 19-52 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5, 8-9, 16-17, 19-20, 22-25, 27-29, 31-34, 36-38, 40, 43-46 and 51-52 are rejected under 35 U.S.C. 102(e) as being anticipated by Marko et al. (US Patent 6,876,835).

Regarding claim 1, Marko et al. disclose a method comprising the steps of:

Receiving, at a mobile terminal, buffered data as a broadcast transmission burst in a time-slicing signal, the buffered data corresponding to a first portion of an information stream, said digital broadcast transmission burst having a duration smaller than the duration of said first portion of said information stream (see 2 lines 10-20, col.3 lines 55-60);

powering-up a digital broadcast receiver in the mobile terminal in synchronicity with the transmission of said digital broadcast transmission burst such that the mobile

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terminal is powered-up when said digital broadcast transmission burst is being received (see col.8 lines 35-39); and

buffering said digital transmission burst in a receiver input buffer of the digital broadcast receiver (see col.8 lines 30-34).

Regarding claim 2, Marko et al. disclose at least one member of the group consisting of: a first-in-first-out (FIFO) buffer, an elastic buffer, a ring buffer, and a dual buffer having separate input and output sections (see col.6 lines 8-19, RAM is data storage on the FIFO basis, or DVD is a ring buffer basis).

Regarding claim 3, Marko et al. disclose buffered data comprises at least one of: a predetermined amount of said information stream and an amount of said information stream received during a predetermined time interval (see col.7 lines 56-65).

Regarding claim 4, Marko et al. disclose said step of powering-up said receiver occurs a specified interval of time prior to said step of receiving (see col.8 lines 35-39).

Regarding claims 5 and 23, Marko et al. disclose said specified interval of time comprises a member of the group consisting of: a bit-rate adaptation time (see col.4 lines 54-55), a receiver switch-on time (see col.8 lines 35-39), and a receiver acquisition time (see col.7 lines 19-35).

Regarding claims 8, 20, 22, 24, 27 and 36-38, Marko et al. disclose the step of powering-down said receiver a predefined interval of time subsequent to said step of powering-up said receiver (see col.8 lines 30-39, "schedule" corresponds to a predetermined interval of subsequent powering-up and powering-down).

Regarding claims 9 and 25, Marko et al. disclose said predefined interval of time comprises a time interval greater than said duration of said transmission burst (see col.7 lines 19-39).

Regarding claim 16, Marko et al. disclose receiving a second buffered data as a second digital broadcast transmission burst, said second digital broadcast transmission burst having a duration smaller than the duration of said portion of said second information stream, wherein the second buffered data comprises a portion of a second information stream (see col.4 lines 54-55).

Regarding claims 17 and 44, Marko et al. disclose the transmission burst and said second transmission burst are multiplexed produce a time-division multiplexed signal (see col.3 lines 55-59).

Regarding claim 19, Marko et al. disclose an apparatus comprising:

- a digital broadcast receiver for receiving at least a first portion of streaming information as a digital broadcast transmission burst (see col.2 lines 14-20);
- means for powering up said digital broadcast receiver at a pre-determined powered-up time, wherein the pre-determined powered-up time is synchronized with the reception of the digital broadcast transmission burst (see col.8 lines 35-39);
- a receiver input buffer for storing said transmission burst (see col.6 lines 9-19);
- and
- means for powering down said digital broadcast receiver at a pre-determined powered-down time (see col.8 lines 35-39).

Regarding claims 28 and 40, Marko et al. disclose an application processor for converting said transmission burst into an information data stream (see col.6 line 8 through col.7 line 5).

Regarding claim 29, Marko et al. disclose comprising a stream filter for stripping said encapsulation from said transmission burst (see col.6 lines 35-39).

Regarding claim 31, Marko et al. disclose a system comprising:

a transmitter system for broadcasting at least a portion of streaming information provided by an information service provider as a digital broadcast transmission burst, said transmitter system including a service input buffer (see col.2 lines 14-20), wherein said transmission burst is transmitted to a mobile terminal and the transmission of the digital broadcast transmission burst is synchronized with a powering up of a digital broadcast receiver of the mobile terminal (see col.8 lines 35-39).

Regarding claim 32, Marko et al. disclose a first usage factor of the service input buffer is used to determine a second usage factor associated with the mobile terminal (see col.7 lines 57-65).

Regarding claim 33, Marko et al. disclose the second usage factor is used to control a start-up time of the digital broadcast receiver such that said digital broadcast receiver receives said transmission burst with a minimum of delay (see col.8 lines 35-39).

Regarding claim 34, Marko et al. disclose at least one service provided the information service provided via at least one information stream (see col.3 line 55 through col.4 line 15).

Regarding claim 43, Marko et al. disclose a second information service input buffer forward storing at least an interval of second streaming information provide by a second information service provider; wherein said transmitter system broadcasts the contents of said second service input buffer as a second transmission burst (see col.3 lines 30-65).

Regarding claim 45, Marko et al. disclose a network operator input buffer (see col.2 lines 14-16).

Regarding claim 46, Marko et al. disclose a system comprising:

a service input buffer for receiving streaming information from a service provider (see col.6 lines 8-19); and

a digital broadcast transmitter for transmitting said streaming information as broadcast transmission bursts to a remote mobile terminal at a higher bit rate than the rate at which said streaming information is received from said service provider (see col.4 lines 42-62, the digital broadcast system is inherently much higher bit rate transmit/receive comparing a mobile terminal), wherein said streaming information is transmitted in synchronization with a powering-up of the remote mobile terminal (see col.8 lines 35-39).

Regarding claim 51, Marko et al. disclose said digital broadcasting transmitter is responsive to said service input buffer such that if the amount of data stored in said service input buffer meets a predetermined amount said digital broadcast transmitter transmits said data stored in said service input buffer as a transmission burst (see col.2 lines 14-34, col.4 lines 4-29).

Regarding claim 52, Marko et al. disclose the streaming information comprises multimedia content (see col.4 lines 4-15).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-7, 10-11, 21, 26, 35 and 39, are rejected under 35 U.S.C. 103(a) as being unpatentable over Marko et al. (US Patent 6,876,835).

Regarding claims 6-7, 10-11, 21, 26, 35, 39 Marko et al. disclose a wake-up feature and detection of memory capacity (col.8 lines 30-39); however Marko et al. fail to disclose the step of returning said receiver to said powered-down mode in response to the setting of a power-down flag in said receiver input buffer. An Official notice is taken that the concept a power-down flag is well known in the art. It would have been obvious a mobile terminal has a capability programming to schedule to sleep and wake-up before and after data have been received from the memory.

Claims 12-15, 30, 41-42 and 47-50, are rejected under 35 U.S.C. 103(a) as being unpatentable over Marko et al. (US Patent 6,876,835) in view of Fell et al. (US Patent 6,674,994).



Regarding claims 12-13, 41 and 47-48, Marko et al. fail to disclose the buffered data is encapsulated using a multi-protocol encapsulator to form encapsulated data standard EN 301192.

Fell et al. disclose the buffered data is encapsulated using a multi-protocol encapsulator to form encapsulated data standard EN 301192 (see col.3 lines 60-65). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Marko et al. with the above teaching of Fell et al. in order to provide Multi Protocol Encapsulation standards.

Regarding claim 14, the modified Marko et al. disclose obtaining said transmission burst from said receiver input buffer; and stripping encapsulation from said transmission burst to form received data (see Marko, col.3 lines 65-66, demultiplexer corresponds to stripping encapsulation).

Regarding claim 15, the modified Marko et al. disclose the step of sending said received data to an application processor for conversion to an information data stream (see Marko, col.5 line 24 through col.6 line 7).

Regarding claims 30 and 42, Marko et al. fail to disclose said stream filter comprises an Internet protocol (IP) filter.

Fell et al. disclose stream filter comprises an Internet protocol (IP) filter (see col.3 lines 60-65). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Marko et al. with the above teaching of Fell et al. in order to provide IP datacasting offers the advantage of digital content that may be distributed over a mobile broadcast.

Regarding claim 49, the modified Marko et al. disclose a multiplexer (see Marko, col.3 lines 55-60).

Regarding claim 50, the modified Marko et al. disclose a network operator input buffer (see Marko, col.2 lines 14-16).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu Nguyen whose telephone number is 571-272-7883.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



March 16, 2007



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